UNIMATIC PCB REMEDIATION - DEEP EXTERIOR SOILS

BACKGROUND

The facility was a foundry that closed in 2002 and currently contains an active assembly and distribution operations. An ISRA investigation begun in 2001 revealed the presence of PCB-contaminated soils in large portions of the exterior portions of the facility. The contamination extended well below the groundwater table, encountered at 16 to 18 feet bg. Soils are a sandy silt.

Over 2000 tons of PCB-contaminated soils were removed from the property in 2001 and 2003 to depths of approximately 20 feet bg. However, the two areas in the rear of the facility listed below were too deep to be removed using conventional excavation equipment because of the hydraulic head. They contain saturated soils with PCB concentrations above 50 parts per million (ppm). The areas are currently unpaved and are easily accessed by heavy machinery.

- A "deep soil wedge" PCB-contaminated soils are present from 22 feet bg to 32 feet bg in an approximately 30' x 32' area; and
- A 45' x 25' area that extends from 22 to 30 feet bg.

The table below shows the soil samples with PCB concentrations above 50 ppm that remain in place in these two areas:

Sample ID #	AOC	Depth (fbg)	Total PCB Conc. (mg/Kg)	<u>Comments</u>
SB-51	AOC 5	20.0 - 20.5	300	
SPE-28	AOC 5	20.0 - 20.5	74	Bottom post-ex samples; soils >50 ppm PCBs beneath this depth
SPE-27	AOC 5	20.0 - 20.5	55	
SPE-23	AOC 5	22.5 - 23.0	290	
SB-83 (23.5-24)	North	23.5 - 24.0	119	Next to "10" on map
SB-84 (23.5-24)	North	23.5 - 24.0	161	East of SB-83
SB-84A (28.5-29)	North	28.5 - 29.0	230 -	
SB-86 (28.5-29)	·North	28.5 - 29.0	89	NNE of SB-83
SB-86A (33.5-34)	North	33.5 - 34.0	63	

PROPOSED REMEDIATION

GZA proposes to stabilize the soils in situ in these two areas so that they would pass a PCB TCLP test. Under this scenario, the soils containing the high PCB concentrations would remain, but would not pose a danger to the groundwater because the PCBs would be rendered immobile by the process.

A feasibility study would be conducted to determine the optimum formula for the stabilization agents. Once determined, the contractor will mobilize to the site to inject the stabilization agents into the deep soils that contain PCBs at concentrations exceeding 50 ppm. Once the agents have cured, tests will be conducted to confirm the effectiveness of the stabilization efforts. The stabilization agents will be reapplied until the soils pass the TCLP test.